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An assessment of critical thinking skills based architectural project course in terms of student's outputs

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Abstract

There is a judgment and interrogation deed in the origin of the word of criticism. This interrogation is a process that could occur by asking questions, by establishing empathy. Critical thinking requires thinking a lot of things at the same time. Therefore, to see that only the positive or negative aspects of a thing might not be enough. Important point is to see both aspects at the same time, be able to make transition between them and at this time is to find a “new” one.

Being with a critical approach to the design process in architectural education is thought to include a loop that keeps the process alive, to make dynamic training process. Constantly, rapidly opening of different subject to be discussed nowadays, adopt to this speed and nor using the existing data rethinking in multiple environments may be realized with critical thinking skills.

In Karabuk University Safranbolu Fethi Toker Fine Arts and Design Faculty Department of Architecture, 2011-2012 academic term, fall semester, ARCH305 Architectural Project 5's term project includes varies exercises with the aim of to boast the students' this skills. Mentioned with varies exercises emphasized that students could make criticize for familiar situations, could look to them by interrogating. There was a competition whose subject was criticized of housing estate organized by TMMOB Chamber of Architects Ankara Office. The competition subject was decided the main project subject of the semester. At the end of the process a student in this class won a prize.

Target of this study is to discuss the importance of critical thinking skills in architectural education with supporting term project. In this way both architectural educations will be rethinking and to discuss how to approach can be found a “new” one in architectural education nowadays.

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1. Introduction

Architecture is defined by the following statement; “the making of architecture calls for clear thinking, but this is a specific embodied mode of thought that takes place through the senses and the body, and through the specific medium of architecture” in the book, named “The Eyes of the Skin”, which is written by Pallasmaa (2011). He remarks that freethinking is the core of the architecture, and the process of experience and expression of this freethinking can be satisfied via senses. In architecture, the freedom of these senses is important. This freedom provides critical thinking about environment. To look with an investigating and interrogating eye, and to experience the environment with such a point of view have a potential to product “new”s on that environment. Otherwise, all of the products will be same with each other, whereas architecture should be a discipline which can be expressed with individual view. One of the most important aims which are expected to be earned by students during the education process is getting over their frame, and having awareness about requisiteness of multiple points of view. Ponty states that the mission of Cezanne’s paintings is “to make visible how the earth touches us”. Pallasmaa (2011) adopts this view and states that architecture’s mission is also similar.

It is emphasized by Pallasmaa (2011) that the architect is in a contrary perspective continuously. Actually, this contrary perspective is a point of view which people should have at the process of their own investigation. Reaching to a conclusion by considering the statement of Aalto, which indicates that “in every case one must achieve a simultaneous solution of opposites”, by the help of the mutual interrogations forms the basics of the comprehension of the architecture.

Architectural education in Turkey possesses some contradicting points in itself. The links between some related processes are broken, so these processes, which should be handled as a whole, are alienated from each other. In this context, the main aim of these studies is to convey a process about the experience between educational and practical environment, the absence of which is one of the most serious problems of the educational system. The following questions are interrogated by project team; how can the integrity between the theory and the practice be provided and how can the students become aware of the relations with their environments. Sharing the term project process that is supported by Pallasmaa’s ideas is also aimed.

2. Architectural Education

The architectural environment of the present time has a set of problems, which are especially related to the education. However; the rapid lifestyle, which has been adopted during the last century, prevents the interrogation of these problems and causes the acceptance of them as they are. When the problems are not seen from a critical point of view, the products that are constructed become identical one with another, whereas it is required that the qualifications of these products should have variances due to the variation of the environmental factors. The students should adopt the awareness of this fact in the first place, so that they can interrogate and think about the variation of necessities for different environments. Increasing this awareness and transforming it to experience and consciousness is a personal gain, the effects of which can be varied from person to person. This gain is notably important for the process of architectural education.

In this context, one of the most important problems is that the fields of architectural education and of the practical area are not supporting each other. However, the architecture is a pattern that should collate these two fields. Summer practices, which are done to provide the integration between the fields of practice and education, are limited only with a little learning of technology related to the work (Yürekli and Yürekli, 2004). Nowadays, the architectural education, which covers the theoretical aspects, ignores the practical aspects. Final products are constructed with the theoretical basis provided by the universities. In fact, not only the final products, but also the process used to achieve these products is important. But each institution has its own approach, and there are some institutions which do not have a process like this. On the other hand, in the field of practice, the mechanism of the capitalist approach is dominant in the applications, and mostly the process is ignored. For this type of a final production, which does not have an apprehension, the identicalness and the qualifications of the products are seen to be insignificant, but quantity is at the foreground.

In this education system, students are pushed into a dilemma at the debut of the undergraduate studies. The students, who get the feeling of the necessity of the choice between these two situations, adopt the practical field in order to choose the real one but cannot link that field to educational knowledge. So they don't care the education and ignore it. At this point, the students mostly adopt the concrete products, because samples that they experience from their environment provide such a mechanism or a thinking way of architecture. However; it is emphasized that the architecture should has a holistic point of view and involve both abstract and concrete approaches together. For this reason, it is required that the qualifications of the architectural education should possess this type of an integrative point of view.

From frame of this theoretical basis, in this report one semester studio with juniors of the Department of Architecture of Karabuk University Safranbolu Fethi Toker Fine Arts and Design Faculty will be shared. At that experience process, a competition subject was given to students as their semester studio project topic, which was launched nearly at the same time. Notice that, the same topic is analyzed in different universities in Turkey at the same semester. At the end of the process, a lot of subjects, which are thought to be unrelated by students, are discussed on the content of unity. Sharing about semester, process, team and studies are discussed under the title of "Term Information and Project Process" in detail.

3. Term Information

One semester of architectural project education program, which was prepared for the junior students of the Department of Architecture in the Safranbolu Fethi Toker Fine Arts and Design Faculty in Fall semester in 2011-2012 Academic Year, was examined in this study.

At the beginning of academic semester, a meeting was organized by academicians; Prof. Aydan Balamir, Asst. Prof. Timuçin Harputlugil, Lect. Fatih Dökmeci, Lect. Elif Köse, Res. Assist. Bengi Yurtsever, Res. Assist. Gözde Çakır. At the end of the meeting, the purpose of architectural project was determined as the concept of housing and existing housing environment to be interrogated by thinking the concept of social in Turkey and alternative idea project to be obtained. Accordingly, it was aimed at developing alternatives models of housing for social housing applications in Turkey.

As part of Urban Dreams Project Idea Contest, "sosyal@sosyalkonut" national student idea project competition was organized by the Chamber of Architects Ankara Branch Office (Url-1, 2013; Figure 1). This competition has chosen project course subject because aim of course was parallel to that of competition; students of architecture would catch a chance to compare themselves to other participating students in competition; experience of competition would provide positive contributions in their architectural profession; and competition would increase motivation to work for the period.



Figure 1. "sosyal@sosyalkonut" competition web site.

4. Project Process

The first week in semester the project subject was announced to students and specification of competition was distributed. Second week, group of project organized a technical trip to Ankara Mamak Municipality which is field of project (Figure 2, 3). Students explored the field of project, obtained maps and information about Mamak region from the municipal authorities. Students got information about their expectations from urban transforming by interviewing with the habitants of “Mamak” region (Figure 4, 5).



Figure 2. Mamak, competition's project area.



Figure 3. Mamak, competition's project area.



Figure 4. Technical trip to Mamak.



Figure 5. Technical trip to Mamak.

Students analyzed of the region by dividing into groups. They learned intense of the current population, rates of young population and unemployment, and the values of the area, public transport networks, and the existing buildings. By using this information, they prepared analysis presentations and abstract model. Once groups had given own design decisions, students divided in order to begin individual design stage.

By the time the semester finished, students had continued getting critics about their projects. In addition to project subject, academicians focused on ecological problems of current architecture; students were given readings on ecology. At the end of these readings “room with garden” and “60m³” projects were studied, students were asked to use knowledge, obtained from these studies, on their projects.

During the period students watched social housing documentaries, including housing applications of famous architectures and providing physical and social transformation at the same time. Students prepared reports concerned with these documentaries at the end of the semester.

34 student projects were evaluated by academician at the final exam and successful students were encouraged in order to participate in the competition (Figure 6, 7). Although some students are successful in final exam, they didn't want to participate in the competition.



Figure 6. Final jury.



Figure 7. Final jury.

In this competition, 43 student projects were evaluated and as one of our students, Eyyüp Türker's project was awarded and this condition satisfied his lecturers and friends (Figure 8, 9, 10). In addition, students had a chance to see other projects which were exhibited in competition colloquium.



Figure 8. Competition ceremony and colluqium.

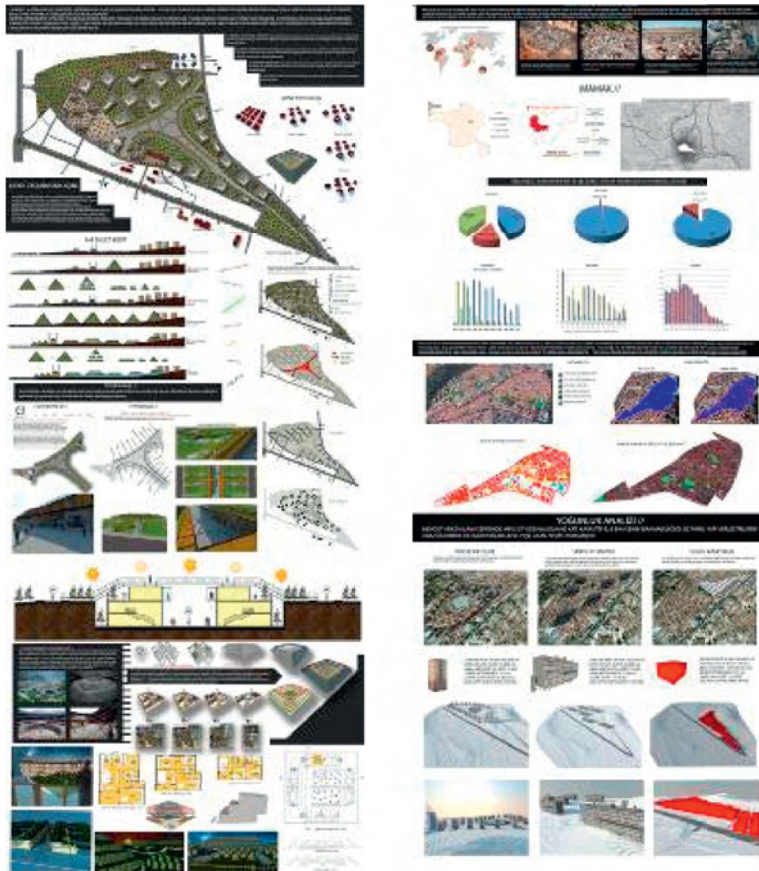


Figure 9, 10. Eyyüp's project.

5. Conclusion

Observation and experience of different approaches of the process of solving the problems on architectural education is very important. The semester which is experienced with the students of Karabuk University is also important in this context. On the other hand, this does not mean that “this problem can easily be solved with a simple competition”. But it has been an intermediary which focuses the students to their architectural projects, also providing them to pass a pleasant semester. Getting involved in the subject always supports products of project at this process. Every participant compares their locations, problems, user components related with the project in a multi suggestion environment. This situation develops a way of thinking in a critical way and this critical point of view is not only directed to their own projects, but they also think about the other’s projects. Students achieve awareness about the problem which is related to architectural environment, and one of the most important results of this may be that, they interrogate and search with their own ideas. Additional works, readings, movies which are done in semester, have always been in a supportive contribution to these productions. One year later, in another semester, with different students, another competitive project strategy is given, because of the positive effect on the process of previous semester. It is observed that similar gains are occurred at that semester too.

In short, it is thought that arguing over competition subject in the content of courses provides to students to feel closer to their own projects and to study in a more pleasant way. Generally, it is possible to say that the process’ gains are in a “positive” way. But, it is thought that this process can be enriched by trying some alternative options. Actually, “critical thinking” is not observed only on the general study process of students, but also observed on instructors with evaluating their approaches, and this makes this process holistic. In other words, the gains of this process are not on one way or static which is adopted only by students, but it is also adopted by instructors, so it is dynamic. By this way, this process becomes an act which has mutual gains pervasively.

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